News Release

Public Affairs and Corporate Communications Office
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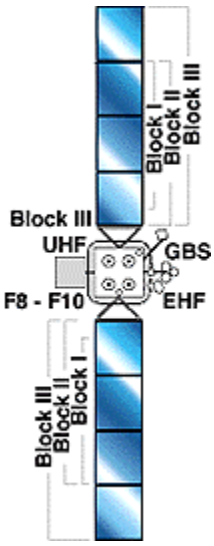
UHF Follow-On Satellite Successfully Tests GBS Video

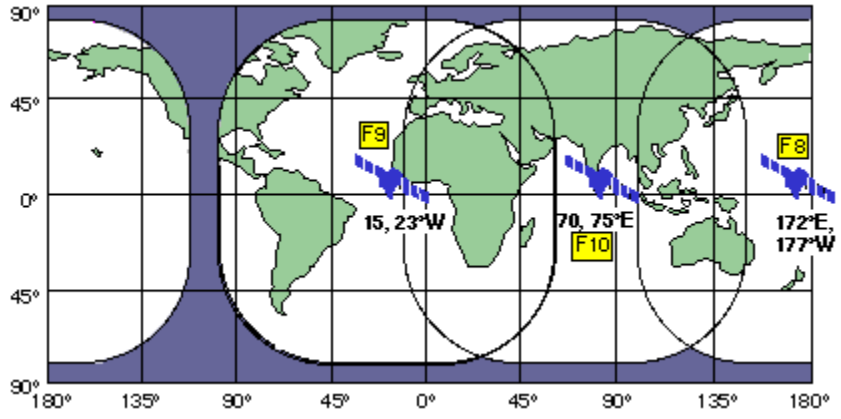


SAN DIEGO -- The Navy and Hughes team began testing the Global Broadcast Service payload onboard the UHF Follow-On F8 satellite last week at Space & Naval Warfare Systems Command facilities here on Point Loma.

The UHF Follow-On F8 satellite transmits Extremely High Frequency (EHF), Ultra High Frequency (UHF), and Global Broadcast Service (GBS) data and voice communications to military activities. The F8 satellite will provide coverage over the Pacific Ocean.

On Monday at 12:20 p.m. Pacific Daylight Time, video was transmitted through the F8 Channel 4 GBS transponder via the wide area spot beam and received by the In Orbit Test Equipment (IOTE) at Point Loma. Live video was encoded using the Digital Video Broadcast waveform at both 8 and 24 Mbps and received by the In Orbit Test Equipment 20-foot antenna interfaced to an Integrated Receiver Decoder with excellent picture quality at both data rates.

Test results to date are nominal. The Navy and Hughes Space & Communications team is currently gathering detailed technical information about the GBS payload. After completion of GBS/EHF interference testing later this week, video will be demonstrated using a 4-foot portable receiver which is more typical of the 1-meter antenna to be used operationally.



The F8 satellite has 11 solid-state UHF amplifiers and 39 UHF channels with a total 555 kHz bandwidth. These frequencies consist of 21 narrowband channels at 5 kHz each and 17 relay channels at 25 kHz. An extremely high frequency communications package compatible with Milstar ground terminals has 20 EHF channels aboard the satellite. The GBS payload replaces the SHF (super-high frequency) payload. This new package includes four 130-watt, 24 megabits-per-second (Mbps) military Ka-band (30/20 GHz) transponders with three steerable downlink spot beam antennas (two at 500 nmi and one at 2000 nmi) as well as one steerable and one fixed uplink antenna. This modification results in a 96 Mbps capability per satellite. Three spacecraft give the DOD near-global coverage. The system will transmit to small, mobile, tactical terminals.

Additional information may be found online at the Space & Naval Warfare Systems Command web site at: http://www.spawar.navy.mil (Graphics courtesy Hughes Space & Communications Company, prime contractor for the UHF Follow-On satellite program)

For more information contact Richard Williamson in the Public Affairs and Corporate Communications Office of the Space & Naval Warfare Systems Command at 619-524-3432.

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